

Summary of Skills

Expert in software development and distributed architecture, with 8 years of experience in designing, and building scalable softwares and infrastructures across diverse tech stacks and industries.

- Contributed in multiple high-impact software projects for both startups and established organizations, employing **Agile** and **SDLC** methodologies.
- Developed robust applications utilizing **Python's** MVC frameworks (Django, Flask, FastAPI), along with **NodeJS** platform (ExpressJS, and Fastify)
- Led the design and implementation of microservices architecture in containerized (**Docker**) and orchestrated (**Kubernetes**, Helm, Terraform, **Argo**) environments, optimizing system scalability and reliability.
- Managed messaging protocols and event streaming architectures including **RabbitMQ**, **Kafka**, **Redis**, PubSub, SNS, SQS and MQTT, enhancing system integration and data flow.
- Implemented cloud solutions using **AWS**, **GCP**, and **Azure**, improving deployment strategies using **CI/CD pipelines** and system availability. Experienced in managing EC2, ECS, GKE, lambda and Heroku environments.
- Designed and implemented network solutions including NGINX, Route53, **reverse proxies**, **service meshes**, and advanced **load balancing** strategies to optimize application performance and reliability.
- Enhanced observability and system reliability using tools like **OpenTelemetry**, **New Relic**, and **Datadog**, Sentry, **Cloudwatch** and PagerDuty providing deeper insights into systems.
- Recognized for excellent leadership in mentoring junior developers and leading cross-functional teams, improving team productivity and project outcomes.
- Developed and **integrated AI** solutions leveraging **LangChain**, Ollama, and various **LLM APIs** to build conversational and data-driven applications.

Professional Experience

Flashfood

Senior Software Developer

Toronto, Canada

March 2022 – Present

- Responsible for adding new features in backend services using **NodeJS** and typescript.
- Managing BFF services, and integration with **react native** frontend.
- Deploying and ensuring reliability and observability of services on **Kubernetes**
- Managing Infrastructure for micro service using terraform, azure, key vaults and helm.

Blackline Safety

Senior Software Developer

Calgary, Canada
Nov. 2021 – March 2022

- Developed and deployed distributed **Python services**, FastAPI, Flask APIs, integrations and unit tests, custom tcp servers in python using tornado and **twisted**.
- Worked closely with SREs to ensure reliability of services, using **Datadog** and **PagerDuty**.
- Improved reliability of services, including tcp and udp servers, deploying to **lambda**, using health checks and various metrics like statsd.
- Integrated applications with various services like RabbitMQ, Amazon SNS, Cloud Run, Kafka, Celery.
- Implemented AWS **CodeBuild/CI** pipelines for existing python projects.

Intragrain Technologies

Server Developer

Regina, Canada
Oct. 2020 – Nov 2021

- Responsible for designing and developing micro services in containerized environment.
- Designed and developed data monitoring system using **Kafka**, Zabbix, Grafana, Influxdb.
- Responsible for developing and managing docker builds and **Kubernetes** deployments.
- Deployed micro services using yaml configurations for Kubernetes and GKE.

Khalsa Labs

Application Developer

Aug 2017 – Oct 2020

- Designed and programmed an automated blogging application using python, nginx.
- Worked on a **ReactJs** application, a front end for a fitness activity tracking application.
- Developed a Pi based face recognition project and **micro python** firmwares for ESP32.
- Design, document, and implementation of the project 'Analysis of DOS and DDOS attacks' using **Deter testbed** network and python scripts.

Lab91 Software Pvt. Ltd

Software Developer

Sep 2015 – June 2016

- Developed Inventory management system to handle 30k plus products inventory and daily transactions of sale and purchase, using python.
- Continuously develop and maintain the customer relationship management system using Django that is responsible for solving hundreds of customer's queries per day.
- Configure and Manage Linux servers for **django based ecommerce** websites by enabling the **WSGI** and SSH, Virtual Hosts on each server.
- Responsible for training and development program for company interns and junior employees.

Redlizard Studioz Pvt. Ltd

Software Developer

Aug 2013 – Aug 2015

- Designed database architecture to handle over a million e-commerce products without losing website performance.
- Optimized the search performance by 33% of e-commerce platform by replacing existing platform's **ORM queries** to SQL queries.
- Developed and developed REST based APIs for mobile application and worked back and forth with mobile development team to ensure the integration process goes smoothly.
- Managed third party integrations with Celery, Monit, Mailchimp, Paypal, and AWS Boto.

Hadron Solutions Pvt. Ltd

iPhone Game Developer, Intern

Jan 2013 - April 2013

- Programmed game logic and physics engine for iPhone based 2D games.
- Debug and optimize various game projects using XCode's profiler.
- Responsible for submitting game source code written in Objective-C under team deadlines.

Education

Post Graduate Certificate in Management, Parkland College Yorkton, SK 2016-2017

Bachelors in Technology (Information Technology), **Punjab Technical University** 2010-2013
Coursework: Algorithms & Data Structure, Operating Systems, Networks
Senior year project work focused on developing a VNC server in python, GPA: 8.0/10.0

Skills Highlights

Languages and Frameworks: Python (Django, Flask, FastAPI), Node.js (JavaScript, Typescript, Express, Socket.IO), Go, React, Vue.js, SQL and NoSQL (MongoDB)

Infrastructure: Docker, Kubernetes, Helm, Terraform, Terragrunt, Ansible, Argo, RabbitMQ, Kafka, MQTT, NGINX, AWS, GCP, Azure, CI/CD pipelines, CircleCI, Cloud Run

Monitoring and Observability: OpenTelemetry, New Relic, Datadog, Sentry, Statsd, Jager